

ABSTRACT

The present invention provides a needle-shaped ceramic body and needle-shaped ceramic catalyst body in which a base material is a high specific surface area porous cordierite body that is stable at high temperatures, and also provides methods of producing this needle-shaped ceramic body and needle-shaped ceramic catalyst body. The present invention relates to a needle-shaped ceramic body and needle-shaped ceramic catalyst body in which a base material is a high temperature-stable, high specific surface area porous cordierite body comprising a porous structure having a prescribed porosity and formed of a needle-shaped cordierite crystal phase, and further relates to methods of producing this needle-shaped ceramic body and needle-shaped ceramic catalyst body, and by using porous cordierite constituted of needle-shaped crystals as a catalyst-supporting honeycomb structure, the present invention is able to inhibit sintering-induced reduction in the specific surface area. Since a honeycomb can be directly produced as the cordierite sinter itself, an inexpensive product can be provided through the simplifying the prior-art step of coating the interior of the honeycomb.